

life of nature decline and grow feeble around us; why love seems to occupy the attention of the Laplanders so little, and that of the Greeks, Italians, and Spaniards so much.

G. E.

XIX. *Dublin Hospital Reports and Communications in Medicine and Surgery.*  
Volume the Fifth. Dublin, 1830, pp. 631. 8vo.

In our last number we laid before our readers an analysis of a recent volume of the Dublin Medical Transactions, and we have now the pleasure of introducing to them another work of a similar character, emanating from the same city, and possessed in every respect of equal merits. Few publications have acquired, and deservedly too, a higher reputation than the Dublin Hospital Reports, and the volume that has just appeared, and of the contents of which we proceed to give some account, is calculated to add to the character the work has hitherto sustained.

The volume under notice consists of two parts. A clinical report of cases in the medical wards of the Meath Hospital, during the session of 1828 and 1829, by Drs. R. J. GRAVES and WM. STOKES, constitutes the first part. It would be impossible within the limits to which we are here restricted to do justice to this very able paper, which includes cases of diseases of the arterial system, of the lymphatics, of the organs of respiration, and of the abdominal viscera—we therefore proceed at once to the second part, and we do this the less reluctantly, as the report of Drs. Graves and Stokes is accessible to the profession here, having been inserted in the volume of *Select Medico-Chirurgical Transactions*, just published by Messrs. Carey & Hart; and moreover there will be found in the periscope of the preceding and present number, several of the most interesting cases contained in it.

The second part of the volume commences with a paper by ABRAHAM COLLES, M. D. on certain diseases of the anus and rectum. The affections treated of, are organic stricture, spasmodic stricture, vascular tumour, and ulcer of the rectum. A perfect cure of the first complaint, Dr. Colles thinks has not been effected by any plan of treatment hitherto employed. The use of the bougies, usually recommended, appears to be well calculated to alleviate the sufferings of the patient; but he says that he has paid great attention to the use of this instrument, and has not been so fortunate as to have effected a permanent cure in a single instance. Dr. C. offers nothing cheering on the treatment of this disease; he has used various internal medicines, mercury, arsenic, cicuta and iron, but without benefit. Large quantities of mucilage, he says, appear to give most relief, and blue pill, combined with a double quantity of Dover's powder, has also occasionally afforded much temporary alleviation.

Spasmodic stricture of the rectum, Dr. C. thinks, has no existence. Spasmodic stricture of the sphincter ani he considers as a rare disease, never having seen but one case of it.

*Vascular tumours of the rectum*, Dr. C. is of opinion, should be treated by excision, in preference to the ligature, and his mode of operating is as follows:—

"The tumours having been made to protrude, by means of a purgative injection, I direct my assistant to pass a hook or common tenaculum through one or two of the largest, while I seize another lengthwise with a polypus-forceps,

then drawing the tumour a little towards the axis of the gut, with a large pair of scissors passed behind the forceps, I cut off all that portion which is engaged between its blades: I then proceed in the same manner to remove those tumours which the assistant holds transfixed by the hook. By fastening and drawing out the tumour with the forceps, we much facilitate its removal by the scissors. Proceeding in this way I guard against these tumours being drawn up within the sphincter as soon as the first had been removed. I do not think that any case will require the removal of more than three of these tumours, and not unfrequently the cure will be ensured by cutting off only two of them. When the operation is finished, the protruded parts generally retire within the sphincter: should any part remain out, it must be completely pushed in with the finger.

"In order to guard against the danger of hæmorrhage, I take care not to prolong my incision higher on the bowel than what I conceive will, when replaced, lie within the circle of the sphincter; for, if we cut the gut higher up, this part, when returned, may bleed freely from not having any surface closely opposed to it. Besides, we know that by cutting higher up we are in danger of cutting the trunk of the vessel, instead of confining our incision to the tumour, which is composed solely by the convolutions of its very minute branches."

When hæmorrhage follows this operation, it may be arrested by a tampon of lint or sponge.

This disease, Dr. C. says, may be rendered very mild, if not ultimately cured, by injecting every night going to bed, eight or ten grains of sulphate of zinc dissolved in four or five ounces of water. Dr. C. has also known much benefit to be derived from smearing the protruded parts with a liniment of ol. oliv. ʒij. and plumb. subacetat. liquor, ʒj.

Ulcer of the rectum sometimes occurs at a short distance above the anus. The remedy for this disease—

"Is to introduce into the rectum a convex-edged scalpel, and make an incision through the entire length of the ulcer, continuing it through the sphincter, and dividing the verge of the anus; as soon as this wound has got into a state of suppuration, we should dress it and the ulcer, with some stimulating ointment introduced on a dossil of lint. The cure goes on without interruption, although it is rather tedious and slow of healing. I need hardly add, that the final cicatrization will be promoted by the occasional application of nitrate of silver."

The second article is on the mucous membrane of the rectum. The author, JOHN HOUSTON, Esq. states that the tube of the rectum does not form, as is usually conceived, one smooth uninterrupted passage, it is, on the contrary, made uneven in several places by valvular projections of its internal membrane standing across the passage. Of these valves there are usually three or four.

"The position of the largest and most regular valve is about three inches from the anus, opposite to the base of the bladder. The fold of next most frequent existence is placed at the upper end of the rectum. The third in order occupies a position about midway between these, and the fourth, or that most rarely present, is attached to the side of the gut, about one inch above the anus. In addition to these valves, of tolerably regular occurrence, there are frequently several intermediate smaller ones, but which from their trifling projection and want of regularity in their situation, merit comparatively little notice.

"The form of the valves is semilunar; their convex borders are fixed to the sides of the rectum, occupying in their attachments from one-third to one-half of the circumference of the gut. Their surfaces are sometimes horizontal,

but more usually they have a slightly oblique aspect, and their concave floating margins, which are defined and sharp, are generally directed a little upwards. The breadth of the valves about their middle varies from a half to three-quarters of an inch and upwards, in the distended state of the gut. Their angles become narrow, and disappear gradually in the neighbouring membrane. Their structure consists of a duplicature of the mucous membrane, enclosing between its laminae some cellular tissue, with a few circular muscular fibres.

"The relative position of the valves, with respect to each other, deserves attention. That situated opposite the base of the bladder, most commonly projects from the anterior wall of the gut; the valve next above from the left, and the uppermost from the right wall: that near the anus, which is of least frequent occurrence, occupies a place when present towards the left and posterior wall. Many deviations from these stated points of attachment for the folds will be found to occur, but the arrangement is nevertheless always such, as to form by their being placed successively on different sides of the gut, a sort of spiral tract down its cavity.

"In regard of the sacculated form which the rectum acquires by the presence of these valves, the gut resembles somewhat the colon in the condition of its interior, but in the peculiar spiral arrangement of the valves, it bears more an analogy to the large intestine of some of the lower animals, in which, as for example, the cæcum of the rabbit, the large intestine of the serpent and dog-fish, a continuous spiral membrane traverses the cavity from end to end, and gives to the alimentary matters a protracted winding course towards the anus."

The physiological purpose of this conformation, M. H. considers to be to support the weight of fecal matter, and prevent its pressing on the anal opening, where its presence always excites a sensation demanding its discharge. But Mr. H. thinks these valves most interesting, as they may possibly become the most frequent seat of that morbid alteration of the inner membrane termed stricture. And there is a weighty reason why the surgeon should bear in mind the existence of these folds, that he may not mistake them for stricture of the gut, and resort to the bougie, and thus induce the disease he intends to remove.

The third article is by Dr. T. E. BEATTY, and is an account of a case of aneurism of the abdominal aorta, with the dissection, and which most conclusively shows that the diagnostic signs supposed to designate this affection are entirely equivocal; but unfortunately it furnishes none which can be depended upon, and we therefore pass on to the next paper.

This is the history of two cases of aneurism, one of the left subclavian, the other of the right carotid, successfully treated by ligature, by WILLIAM HENRY PORTER, Esq. The most interesting points in relation to these cases, are, 1st, that in both instances, notwithstanding the large size of the arteries, a single round ligature only was employed; a mode of treatment, which, according to Mr. Porter's experience, "is more successful than any contrivance for arresting the current of the blood, whether by the presse artère or otherwise."

"2d. That the carotid was tied within a quarter of an inch of its origin from the innominate, a circumstance heretofore considered as likely to interfere with the success of the case, by preventing the formation of an internal coagulum. 3d. The very trifling disturbance of constitution that followed on the tying of so important a vessel as the subclavian artery; the patient never having a single symptom that could occasion anxiety as to the result, until the occurrence of inflammation and suppuration of the sac; and 4th. The recovery of both patients notwithstanding suppuration, an event which has always been considered

as pregnant with the most dangerous consequences. Indeed, in the case of carotid aneurism, three times was the woman's life in such imminent peril, as almost to preclude hope, but in the other instance the patient recovered with as little trouble, and perhaps with more rapidity, than if it had been a case of common abscess."

The physiological and practical observations on the utero-placental circulation, and the phenomenon of placental soufflet, with its influence in detecting the existence of pregnancy, and the death of the fœtus in utero, by EVONY KENNEDY, M. D. (the next paper in order,) are exceedingly interesting. Dr. Kennedy is of opinion, that the placental soufflet principally depends upon the transmission of blood through the arterial tubes and cells of the placental part of the uterus, an opinion which he has rendered exceedingly probable, and he states that he has found this sound distinctly cognizable after the second month from impregnation; and that its value as a diagnostic method cannot be denied. Dr. H. also points out many valuable indications which he obtained from the placental soufflet.

Our limits will not permit us to give a detailed analysis of this paper, it will, however, be found, with the excellent memoir by Dr. Ferguson, on the same subject, noticed in our last number, in the volume of Select Medico-chirurgical Transactions to which allusion has already been made.

The sixth article is entitled "Observations on some of the Affections of the Fingers and Toes, attended with Fungous Growths," and is by FRANCIS RYND, Esq. The extremities of the fingers and toes are occasionally the seats of diseases, which although not actually tending to the destruction of life, are productive of great anguish and pain to the patient, and are very tedious and sometimes difficult of cure, and are well worthy of the attention of the physician. According to Mr. Rynd—

"The membrane or matrix of the nail exhibits three forms of fungoid growth, similar in their appearances and the distress they occasion, differing in their situations and the causes by which they are produced. One of these is where the matrix is the original seat of the disease; it occurs most frequently idiopathically, or at least no satisfactory cause can be assigned for its production, but occasionally it seems to arise from some external violence, such as a blow or bruise. The second is that which owes its origin to pressure of the nail on the membrane, or what is termed the nail growing into the flesh. And the third is a fungous growth of the matrix, symptomatic of, and apparently occasioned by, the existence of an abscess underneath it. That the two first of these may eventually become the same, or that the constant pressure of the edge of the nail on this most sensible structure will involve it altogether in one mass of disease, cannot be controverted, and then the same treatment will be applicable to both; but if the third or symptomatic species happens to be mistaken for either of them, and the surgeon's attention be directed to the fungus instead of to the abscess, of which it is an indication, months of misery will be inflicted on the patient, who only recovers when the abscess bursts or is opened."

This last disease, which appears to be the true *onychchia maligna*—

"Commences usually at the root of the nail, it may be with a small collection of matter like the cutaneous or superficial paronychia. This bursts, and the posterior edge of the nail is seen detached, while a small pale-coloured and exquisitely painful fungus projects behind it; as the nail is thrown off, the fungus increases, becomes red, and if pressed upon by the nail, the pain is excruciating: sooner or later the entire nail is thrown off, but it does not leave a fun-

gous growth regularly occupying its former situation; the matrix has been secreting its proper material of which the nail is composed, but it has done so irregularly, unhealthily, and in patches, and the irritation and pressure occasioned by those small portions of the nail which usually adhere to the surface by one edge only, produce deep and formidable ulcerations. The extremity of the toe or finger, (and the great toe is very frequently enlarged,) now appears to be expanded in breadth, with a large ulcer occupying a larger space than that of the former nail. Its surface is irregular, partly fungoid, partly excavated; on it are observed small portions of nail firmly adherent, and which cause great pain if pulled or pressed upon. The ulcer bleeds often, and usually two or three small clots are seen upon its surface: its discharge is not often profuse, but it is glutinous, and the dressings adhere to it. The margin of the sore is elevated, of a dark red colour, but it does not spread, and having once attained to a given size, something larger than that of the former nail, its progress is checked, and it remains for months in nearly the same condition, occasioning the greatest pain, and rendering the hand or foot, as the case may be, nearly useless."

The causes of this disease have never been satisfactorily explained.

The remedy recommended by Mr. Rynd is to make a deep incision down to the bone, from three to four lines behind the posterior margin of the sore, which incision is to be carried round it, and then the entire surface is dissected out.

"The wound is dressed simply with pledgets of lint moistened with spirit and water, and is usually healed in the course of sixteen or eighteen days. But the success of this operation depends on the entire surface being completely removed, for if any portion is left behind, it still retains its quality of secreting nail, and its indisposition to heal; the wound still remains open at that part, nor will it cicatrize until this structure is destroyed either by a caustic, or by the knife."

This operation has been lately attributed to M. Dupuytren, but Mr. R. says that it has been performed for years in the Dublin hospitals, and it is the same operation which was performed by the late Dr. Dorsey, see his *Elements of Surgery*, Vol. II. p. 349. Professor Physick has treated this disease with great success, by sprinkling the fungus with a powder consisting of equal parts of red precipitate, white vitriol, and corrosive sublimate, then covering it with dry lint, and pouring over the whole tincture of myrrh.

The next disease noticed by Mr. Rynd is that known by the name of inverted toe nail. Mr. R. is of opinion that there are several varieties of this affection. Sometimes it consists, he says—

"Of a thickened condition of the nail, together with its taking a wrong direction in some part, and growing fairly down into the soft parts. This thickening of the nails is very analogous to the formation of corns, rarely produces much greater inconvenience, is seldom accompanied by fungous growths, and is relieved in a manner similar to that by which corns are relieved, by steeping the foot in warm water until the nail is completely softened, scraping down the nail with the edge of a bit of glass, and freeing the toe from the pressure that had stimulated the matrix to too active a secretion of the material of the nail and thus produced the disease. In other forms of this affection the nail is not thickened; on the contrary, its edge sometimes is thinner where it is detached from the subjacent membrane which is pushed against it, becomes fungoid, and thus produces the disease within itself. In this affection the toe positively becomes altered in shape; it is contracted and turned slightly upwards at the side whereon the nail seems to press, and it is this contraction which forces the soft parts against the edge of the nail."

For the cure of this disease, Mr. R. advises the operation just described for the cure of onychia maligna; a less painful, and we suspect equally successful operation, is that devised by our lamented colleague, the late Dr. Godman, and described in the twelfth volume of the Philadelphia Journal of the Medical and Physical Sciences.

Art. VII. is an account of a case of ruptured intestine, related by Mr. JOHN HART, in which the jejunum was ruptured transversely half across, allowing its contents to escape into the peritoneal cavity, causing peritonitis and death. There was no lesion of the abdominal parietes. Mr. Hart also notices a case of ruptured spleen from a fall, and which had cicatrized, and also an instance in which the liver was torn completely across from its anterior to its posterior margin, and several of the large branches of the *vena portæ*, hepatic artery, and *venæ cavæ hepaticæ* divided. In such cases little can be done in the way of treatment; Mr. H. however very properly recommends that purgatives should not be given, and that the intestinal canal should be kept quiet by opiates while the peritoneal inflammation is combated by general and local detraction of blood. A very interesting case of peritonitis, communicated by Drs. Graves and Stokes is appended, and which will be found in our Periscope, department of Practice of Medicine.

We pass over the pathological observations by JOHN HOUSTON, Esq. and the cases of diseased brain by ROBERT LAW, M. D. the most interesting of which will be found in the Periscope of the present and preceding numbers, and also the case of obstinate psoriasis, successfully treated by WILLIAM WEST, M. D. and which we shall insert in the Periscope of this number. See department of Practice of Medicine.

The next article in order is an exceedingly interesting letter from J. CHEYNE, Esq. physician-general to the forces, an experienced and discriminating physician, recommending small and repeated bleedings in hæmoptysis and incipient phthisis.

The treatment of this latter disease more especially is a subject of extreme importance, and one respecting which the opinions of physicians are utterly at variance, some recommending active exercise and full diet, and others repose, abstinence, and active antiphlogistic measures. Though both may be in extremes, is perhaps true; yet, entertaining as we do the belief of the inflammatory character of tubercles, we cannot help suspecting that the treatment of the first is farthest from the most judicious method. It is foreign to our purpose at present to enter into the discussion of this subject; we may perhaps have occasion to return to it however, in our next number, when we propose to give an account of some of the new remedies for consumption—at present we must proceed to the consideration of Dr. Cheyne's observations.

"I have often seen phthisis," says Dr. Cheyne, "commence without any unequivocal symptom of pulmonary disease, but apparently as a fever of an inflammatory kind, with quick pulse, hot skin, flushed countenance, white tongue, high-coloured urine, &c. &c. The disease might have passed for general fever, no local affection being predominant; some mitigation of symptoms was usually observable after a period of two or three weeks, and the physician, expecting that the disease would, in all likelihood, terminate gradually, and probably without crisis, naturally promised recovery, although it might be slow; instead of which, consumption either rapidly advanced, the case becom-

ing what is vulgarly termed galloping consumption, or its progress was slow and insidious. In the course of such attendances, the physician at last begins to feel some surprise at the continued quickness of the pulse; he fears that all cannot be right, while the patient, although he eats well and walks about, does not gain strength; the breathing too is not quite natural, an occasional dry cough occurs, of which the patient seems unconscious, and emaciation is palpable. The disease has now made some progress, and another physician being called in, the case is looked at with a new eye; night perspirations are discovered; on minute inquiry hectic fever is more than suspected, and the case is pronounced to be incipient phthisis. It is in the more chronic cases to which I have alluded, that small bleedings of six ounces practised once in four or five days have sometimes apparently proved sanative.

"There is a species of hæmoptysis, perhaps it ought rather to be called bronchial hæmorrhage, which runs a course of two or three weeks, I think generally the former period, which is also attended with symptoms of general fever, and in which the hæmorrhage may seem to be a symptom of general fever; but in my judgment both the fever and hæmorrhage are symptomatic of incipient consumption. In these cases recovery seems to take place under antiphlogistic treatment, but often it is not solid recovery. Gradual emaciation is observable, with that ominous, dry, barking cough, which is often so long a solitary symptom of slowly advancing tuberculation. Then after months of what may be designated unconfirmed health, rather than manifest disease, the patient declines more rapidly, and hectic fever concludes the sad history. Patients of this description may sometimes be saved by timely bleedings, not exceeding six ounces every sixth or seventh day, with a regimen suited to the strumous diathesis."

Pulmonary apoplexy, Dr. Cheyne says, may also be sometimes successfully treated by small bleedings repeated at stated periods.

"In bronchial hæmorrhage," says Dr. Cheyne, "it is not the loss of blood which is destructive to life, but the inflammation and disorganizing process, which is caused by tubercles, of which the hæmorrhage is but a symptom, and often even a means of temporary relief. And considering that not merely has the hæmorrhage been checked by venesection, but the vascular irritation on which it depends, in some sort arrested, I have been led also to try small bleedings once every week or ten days, in what I conceived to be incipient phthisis, and with a degree of success which forbids the relinquishment of that practice. Among other encouraging cases, I may mention that of a young gentleman of a family which consumption had completely ravaged: he came to me last spring with a dry barking cough, (not from cold.) There was a portion of the thorax in which respiration was inaudible, and which, on percussion, emitted scarcely any sound, and was also the seat of uneasiness; and emaciation had already commenced. This patient was relieved by these bleedings, and when I last saw him he said he was quite well, and his appearance did not contradict the assertion.

"Both in hæmoptysis and in incipient phthisis these small bleedings may be practised with safety, and often, if I mistake not, with more advantage than any other remedy in use. To acquire a just view of such cases we ought to consider them as instances of scrofula affecting the lungs, in which an inflammatory state is caused by the presence in that organ of irritating substances, as tubercles doubtless are. In phthisis these attacks of inflammation in the tuberculated portions of the lungs precipitate disorganization. Phthisis is often, for a long time, only suspected, until uneasiness in the chest, perhaps increased frequency of the pulse, hurry of respiration, and greater debility, prove that inflammation around some clusters of tubercles is more speedily accomplishing the destiny of the patient. If the inflammation were subdued and the general health improved, perhaps it might be within the power of the absorbents to re-

move tubercles if still in an early stage. This view would justify the exhibition of remedies of opposite kinds. No point is better established than that the scrofulous patient is best treated by nourishing and restorative food and medicine, but there are many cases of scrofula in which we must for a time substitute bleeding and an antiphlogistic regimen for generous food and stimulating applications, to prevent the disorganization of a viscus, and of such cases this appears to be one.

"In hæmoptysis venesections act rather as an alterative than a styptic; mere hæmorrhage from the lungs does not justify the measure. Bleeding, however, is amply justified by the existence, during hæmoptysis, of pain, hurried respiration, or any other symptom of parenchymatous or of membranous inflammation.

"In cases of hæmoptysis with inflammatory symptoms, venesection may be necessary during the attack; but generally tartar emetic in nauseating doses, given every hour, or every two hours, proves a more powerful styptic: one-third or one-fourth of a grain of tartar emetic in a draught containing also ten or fifteen grains of nitre, a combination which is often powerfully diuretic, will be still more efficacious."

We have repeatedly employed this remedy ourselves with marked benefit, and have at the same time irritated the chest with tartar emetic ointment with great advantage.

When the respiration is, however natural, and there is no cough, stricture, or pain in the thorax, Dr. C. says the case will be better treated by small doses of opium, two or three grains of Dover's powder, for instance, every two or three hours, &c.

The treatment recommended by Mr. Cheyne in incipient phthisis, is journeying if practicable; diet as generous as the state of the lungs will permit, in some cases a glass or two of claret, and small bleedings. Sponging the chest and arms with very dilute muriatic acid, or with five parts of Mindererus's spirit and one of rosemary: an issue over the most suspected portion of the lungs, or a succession of blisters after each bleeding, not much larger than a dollar. A light bitter two or three times a day, with twenty or thirty drops of laurel water, or the nitro-muriatic acid internally, or perhaps some preparation of iron.

Some interesting contributions to ophthalmic surgery, by ARTHUR JACOB, M. D. follows.

In a report in the London Lancet, of a lecture of Mr. Lawrence's, there is the following passage. "The conjunctiva sometimes acquires a livid tint in persons who have long employed the nitrate of silver locally; and as far as I know that change of colour is permanent." Dr. Jacob states that he has frequently noticed this effect of the nitrate of silver, and that he believes the stain to be indelible, even when existing in the slightest degree. He says that he has not observed that the application of even a strong solution for a fortnight, or three weeks, will produce the effect, but he believes its continuation for six weeks or two months will do so. The colour, it is said, in cases where the solution has been used for only a short time, is a light olive, sufficiently deep however to produce very obvious deformity; and when a strong solution has been used for a longer time, the stain much deeper.

We cannot doubt from the authority of Mr. Lawrence and Dr. Jacob, that these stains do occur, yet we question much their being of so frequent occurrence as is stated by Dr. Jacob. We have used the nitrate of silver in hundreds of cases

in the Pennsylvania Eye Infirmary and private practice, and have not seen these stains in a single case; Mr. ESTLIN, of Bristol, who has been for nearly twenty years engaged in the treatment of disorders of the eyes, and has had the management of fourteen thousand cases of these complaints in a public institution, says that he has "never seen a single instance of any stain being left upon the cornea in consequence of this application;" "nor can I believe," adds Mr. E. "that this event has escaped my notice from its occurring in patients whom I have not had an opportunity of seeing after recovery, as I have constantly under my care whole families, now grown to men and women, whom I attended as children with ulcers of the cornea, and in whose cases I used the lunar caustic." Mr. E. has seen one case only in which it occurred on the conjunctiva.\*

Mr. R. T. Hunt, in an experience of eight years with the remedy, during three years of which time he has been assistant surgeon to the Manchester Eye Infirmary, has rarely ever seen this stain described by Dr. Jacob. Mr. Barton, the senior surgeon of the establishment just named, confirms the statement of Mr. Hunt.†

The nitrate of silver is certainly the most valuable remedy we possess in many of the diseases of the eye, and we cannot help thinking that the observations of Dr. Jacob will be mischievous if they deter practitioners from its use.

The injury above noticed, Dr. Jacob states is not the only one which follows the use of this remedy; the effects of its application to ulcers of the cornea, he says is still more to be dreaded. When applied to such ulcers, he adds, either in solution or substance, it either adheres to or becomes entangled in the flocculent surface, and if this surface be not a slough, and completely cast off, the nitrate of silver, rendered black or brown by exposure, becomes permanently fixed as the ulcer heals, and constitutes an indelible dark speck. We have never seen this either ourselves from the solution of nitrate of silver, though in the habit of employing it in almost every case of ulcer of the cornea; and we have never seen it produced but in a single instance by the solid caustic, and that was a case in which the cornea was extremely thickened and disorganized, and the slough never completely separated. Mr. Hunt says that he has never witnessed it;‡ and Mr. Estlin makes the same statement.§ This latter gentleman indeed says, that contrary to Mr. Jacob's opinion, his experience has led him to the conclusion that the cornea is very unsusceptible of retaining the discolouration of any extraneous substance.

The injury produced by the nitrate of silver is, however, seldom so great, according to Dr. Jacob, as "that which more frequently follows the use of acetate of lead," of which we believe no notice has as yet been published.

"If a solution of acetate of lead," says Dr. J. "be applied to the eye when the cornea is suffering from an ulcer of a particular character, the acetate is decomposed, and a white precipitate is deposited on the ulcer, to which it adheres tenaciously, and in the healing becomes permanently and indelibly embedded in the structure of the cornea. The appearance produced by this cause cannot be mistaken, its chalky impervious opacity, distinguishes it from the pearly

\* London Medical Gazette, Vol. VII. p. 811.

† Loc. cit.

‡ Loc. cit.

† Ibid. Vol. VII. p. 618.

semi-transparent structure of even the densest opacity produced by common ulceration. The degree and form of the opacity is varied as the original ulceration was varied. If the original ulcer was deep and circumscribed, the opacity is chalky-white, dense, and defined. If the original ulceration was superficial and diffused, or composed of numerous small specks of ulceration scattered over the cornea, the opacity presents the appearance of several irregularly-shaped dots or specks of a dirty white appearance. If the ulceration has been attended by a prolapse of the iris, the peculiar opacity forms a complete or partial margin round the place of the prolapse, the structure of the iris not entangling the precipitate as that of the cornea does. The opacity appears to be produced at once, and by a single application; I have seen it the day after a drop of solution of acetate of lead had been put into the eye by mistake."

We have no experience ourselves in relation to this effect of acetate of lead, never having used it as an application to ulcers, not thinking it a proper remedy, and the representations of Dr. Jacob will certainly render us still more reluctant to resort to it.

The next subject treated of by Dr. Jacob is treatment of obstructions in the lachrymal passages. Dr. Jacob considers obstructions of these passages as of three kinds; 1st, that caused by mucus plugging the narrow part of the nasal duct; 2d, closure of the passage from tumefaction of the mucous membrane; and 3d, true stricture partial or permanent.

For the removal of the obstruction caused by the plugging up the duct with mucus, Dr. J. recommends syringing; the introduction of the flexible probe; and to direct the patient to compress the sac often with the point of the finger in the course of the day; to blow the nose frequently; and holding the nostrils to inspire strongly, thus exhausting the air from the nostril, and the nasal duct opening into it, consequently removing its contents.

In obstructions caused by tumefaction of the sides of the sac, Dr. J. advises the application of leeches over or near the sac, if it be tender to the touch, and astringent solutions, as the *saturated* solution of acetate of lead or alum, introduced by an Anel's syringe.

In cases of true stricture, a different treatment is required, but Dr. J. asserts from experience, that the passage may be reëstablished permanently without cutting into the sac. As Dr. Jacob's directions for the employment of the necessary means are exceedingly minute, and we have seen many practitioners exceedingly embarrassed in applying them, and knowing from experience that the instructions given by Dr. J. will enable most persons to succeed, we give them at full, cautioning, however, against the use of sealing wax bulb to the bristles, which we cannot but think to be a dangerous expedient.

"The surgeon having satisfactorily ascertained by the syringe that there is no passage for fluids, should next sound the duct with a flexible probe, for this purpose a hog's bristle answers excellently, the largest size should be selected, as there are very few puncta which will not admit the largest; the bristles should be perfectly grown, the bulb at the extremity round and solid, such as are used by shoemakers, and if the punctum be large, the bulb may be enlarged by the addition of a speck of sealing wax. Such bristles should be carefully prepared beforehand; the bulbs freed from the particles of cuticle which adhere to them, and polished by oiling and rolling them between the finger and

thumb: those headed with sealing wax should be neatly made, and care should be taken that the wax will not slip off, by applying it sufficiently hot and burning it in. Other coarse hairs may also be used, and are often preferable to hog's bristles, being more flexible: I have the tail of an hippopotamus which supplies me with this kind of probe of every size required. I take such a bristle as I have described, cut to a length of about three inches, apply the bulb perpendicularly to the punctum, and if it does not enter, press steadily until I see the resistance yield, and that the bulb has entered. I then pass it horizontally, as I before described, until I strike it against the opposite side of the sac, and then turn it into the perpendicular direction. This, however, can scarcely be accomplished, from the flexibility of the bristle, without catching a short hold of it, which cannot be done with the fingers; the operator must therefore seize it in the square-nibbed forceps: the small one used for extracting eyelashes answers well, or common small-sized dissecting forceps cut square at the point instead of being pointed. When, by this means, the bristle is turned up into the perpendicular direction, and the bulb down into the nasal duct, it should be pressed against the obstruction with as much force as the bristle will bear, turning, pressing, and relaxing, leaning sometimes to one side, sometimes to another, as a person would manage an elastic bougie against a stricture of the urethra. If after every effort the bristle cannot be passed, recourse must be had to the metallic probe. The surgeon should be provided with a number of silver probes the size of the bristles, and softened so as to admit of being easily bent without breaking; they may be cut to a length of an inch and a half, with a quarter of an inch of the hand-end turned at a right angle in order to be fitted to remain in the passage like a style, if necessary; or they may be left of the usual length, which I prefer, the short probe or probe style, as it may be called, being less manageable. The silver probe thus introduced, is raised, but can seldom be brought exactly into the line of the sac, in consequence of the prominence of the brow; I therefore here bend it by holding it against the margin of the orbit and depressing the hand-end. Thus, having a probe in the duct, bent at the distance of about an inch and a half from its bulb, I push it firmly down, breaking through the resistance until it has sunk to the elbow which I bent upon it, and the patient feels it in the nostril. It may be questioned whether the passage thus made is in the proper direction, the probe may be forced between the bone and periosteum, or perhaps even into the antrum; I can only say that I have often practised what I now recommend, and the result has proved that the probe took the course of the duct. The passage having been thus artificially formed, it remains to preserve it; this can only be accomplished by keeping some foreign body in it until it is permanently reestablished. If the style probe, an inch and a half in length, has been used, it will do well enough, the angle at which it had been bent near the hand-end, preventing it from slipping into the punctum or sac; and this is the advantage of using this short one, which I have already said is not so manageable as a probe of three or four inches. I am myself in the habit of introducing the probe of full length, and when I have pushed it through the obstruction I bend it at the punctum, and cut it off so as to leave an angle or hook head outside the punctum to prevent it slipping in. This bending and cutting soft silver wire is easily accomplished with a good pair of cutting pliers, such as are used by wire-workers. After the probe has been once passed, the surgeon may be unwilling to run the risk the withdrawing of it, lest he should not be able to get a softer and more flexible one through the same passage. If the passage has been easily forced I withdraw the silver and introduce a bristle probe; if there has been much difficulty in forcing it, it is better to secure the steps we have gained and leave the silver one in. If the silver one be retained it should be adjusted so as to make the least possible pressure on the punctum or margin of the lid, and if the bristle be left in, the portion outside the passage should be

bent and firmly secured to the cheek, or over the cheek bone by court plaster. If the probe be allowed to stand perpendicularly, it drags the punctum towards the nose, and either causes it to be dilated or ulcerated, and thus spoiled. The only dressing to the part should be a small light compress of old linen kept constantly wet with cold water. The probe should not be allowed to remain longer than forty-eight hours at the utmost, as it is liable to produce ulceration or dilatation of the punctum: it is to be replaced by catgut. The surgeon having provided catgut of the proper size, should soften the point between the teeth to prevent it from catching against the side of the sac, and with the square-nibbed forceps dexterously introduce it, and push it on until a sufficient length has passed. It must not be denied that this is often a matter of difficulty requiring much care and perfect use of the fingers, but it is no more to be abandoned on that account than any other difficult surgical operation. If two or three inches of the gut have been passed into the nostril, the operator need not take any trouble to draw it out through the external nostril, as this will be accomplished by the patient when it has become soft. The portion of gut outside the punctum should be coiled up and secured by bandage on the forehead, and no more dressing than a light damp compress applied. The next day the part should be examined and cleaned, but the gut need not be disturbed; the day after that, however, the portion which hangs from the nostril should be gently pulled until an equal portion of fresh gut from the coil on the forehead is brought to replace that which has been withdrawn. The gut being mere animal membrane, softens and sometimes even dissolves before the second day, it should not, therefore, be allowed to remain unrenewed longer than forty-eight hours. About the fourth day from its introduction the gut should be withdrawn altogether, the part well cleaned with a sponge and warm water, the sac compressed, and the patient directed to clear the nostril by repeatedly blowing through it. A stream of water should then be sent through it with the syringe, and the patient should receive particular directions to sponge the part with lukewarm water frequently in the day, to compress the sac repeatedly with the point of the finger, and to make an effort to inspire often strongly with the nostrils closed. The next day it should be syringed again, and if there should be any difficulty to the passage of the water, a bristle probe headed with sealing wax should be passed and withdrawn, and the syringing repeated. The third or fourth day the astringent solution may be used, as directed in a former paragraph, with the occasional use of the bristle probe, until the flow of tears down the cheek ceases, and the eye resumes its natural appearance."

Dr. Jacob concludes his paper with some observations on the treatment of entropion, or tapping the eye, and on an improvement in spectacle frames.

We must here take leave of the volume under consideration, though several valuable papers remain unnoticed. The most important of these will, however, be found in the volume of *Select Medico-Chirurgical Transactions* already several times referred to, and others will be hereafter noticed in our *Periscope*. The analysis we have given of a part of the volume will enable our readers to determine whether the favourable opinion we expressed of its merits is not fully justified; and in conclusion we cannot withhold the pleasing intelligence that it is intended in future that the work shall contain a more extensive series of hospital communications, and that a volume will be published at shorter intervals than hitherto.